

Abstract of the Disclosure

An atomic layer deposition (ALD) thin film deposition equipment having a cleaning apparatus, this equipment including a reactor 100 in which a wafer is mounted and a thin film is deposited on the wafer, a first reaction gas supply portion 210 for supplying a first reaction gas to the reactor 100, a second reaction gas supply portion 230 for supplying a second reaction gas to the reactor 100, a first reaction gas supply line 220 for connecting the first reaction gas supply portion 210 to the reactor 100, a second reaction gas supply line 240 for connecting the second reaction gas supply portion 230 to the reactor 100, a first inert gas supply line 260 for supplying an inert gas from an inert gas supply source 250 to the first reaction gas supply line 220, a second inert gas supply line 270 for supplying an inert gas from the inert gas supply source 250 to the second reaction gas supply line 240, an exhaust line 400 for exhausting the gas within the reactor 100 to the outside, and a cleaning gas supply line 340 connected to the first reaction gas supply line 220 for supplying a cleaning gas for cleaning the reactor 100.